Ted Stevens Anchorage International Airport
2008 Environmental Section Summary Report

Solid and Hazardous Waste management

Because of increased tipping fees at the Anchorage Regional Landfill during 2008, Ted Stevens Anchorage International has increased our efforts to divert materials from the landfill by reusing and recycling as many materials as possible. Cardboard recycling alone from airport tenants and State of Alaska operations prevented over 150,000 pounds from going to the landfill, subsequently saving close to $4000 in tipping fees. Other materials recycled at the airport include tons of lead acid batteries from vehicles and emergency power and lighting fixtures, over 100,000 pounds of scrap metals, thousands of cubic yards of reclaimed/reground asphalt and concrete, used oil, mixed paper and newspaper.

During 2008 our waste minimization efforts resulted in the airport generating less than 1000 pounds of hazardous waste. Recycling, product substitution and training airport staff on proper identification, handling, and disposal of hazardous and solid waste has contributed greatly to the airport reducing the amount of hazardous materials that is used and disposed by the airport. Maintaining status as a Conditionally Exempt Small Quantity Generator of hazardous waste throughout 2008 has allowed the airport to dispose of small amounts of hazardous wastes locally instead of shipping it to treatment facilities in the lower 48.

During 2009 Airport Environmental will be looking to improve the management of solid and hazardous waste by expanding our recycling infrastructure to encourage and include off-aircraft recycling.

Pollution Prevention & Spill Response

During 2008, 32 spills totaling ~400 gallons were reported to the Environmental Section at Ted Stevens Anchorage International Airport. Most the spills were accidental releases during aircraft refueling operations. Also the majority of the spills were onto paved surfaces where they had minimal environmental impacts and spill response was immediate in most cases which prevented any contaminates from reaching sensitive environments.

To further prevent any contamination from entering Cook Inlet or Lakes Hood and Spenard the airport operates three “watershed protection stations” that are designed to capture and recover petroleum contaminates from stormwater discharges.

In 2009 a project is planned to further improve the ability to recover any petroleum contaminates from stormwater discharges.

Contaminated Site Investigation and Remediation
The Airport Environmental staff works closely with airport tenants and the Alaska Department of Environmental Conservation (ADEC) to address and resolve issues related to contaminated sites on Airport lands.

The ADEC authorized "conditional closure" for a few more sites on airport property. The conditional closure status is granted when the responsible party (Anchorage International Airport in this case) has provided enough scientific data to justify that the known contamination on a property will not present a health hazard to humans or animals and does not pose a significant threat to the environment. It does not relieve the responsible party of their liability to perform further cleanup on the site if the conditions change. By applying this risk based approach to site remediation, the Environmental Section hopes to close out more of these contaminated sites in the coming years.

Environmental/Health & Safety Training
Airport employees received several hundred man-hours of training from the Environmental Section at Ted Stevens Anchorage International Airport in 2008. Training was offered on topics such as

- Pollution Prevention,
- Waste Minimization,
- Spill Response, Control & Containment,
- Recycling,
- Energy Conservation
- Hazard Communication Standard (OSHA required),
- Asbestos Awareness (OSHA required) and
- 1st Responder Emergency Response (OSHA required).

This training provides Airport employees with the knowledge base to recognize workplace hazards, protect themselves and others, report incidents, accidents, and to work safely and productively.

Abatement of Hazardous Building Materials
The remodeling/reconstruction of the A & B concourses at the airport has provided an opportunity for the Alaska Department of Transportation to remove hazardous building materials that were used in the initial construction of the buildings. During the 2008 phase of this project over 60 tons of regulated asbestos containing building materials (ACM) were removed from the buildings. In addition, another 1.2 million pounds of materials *suspected* to contain asbestos and/or lead based paint were handled separately and disposed of in a landfill designed for construction debris. The high weights can be attributed to disposal of building materials such as cinder blocks, concrete, flooring, wallboard etc. that contain very low levels of non-friable asbestos. Contract provisions for this project specify that no hazardous building materials will be used during reconstruction of the A & B concourses. The removal of ACM, suspected ACM, lead based paint and fluorescent light ballasts (assumed to contain PCBs) from these areas

completes the majority of abatement projects within State of Alaska buildings at the airport.

Water Quality
We are continuing to see improvement to the water quality of Lakes Hood and Spenard. Our "Waterbody Recovery Plan" implemented in 2005 appears to be working. The recovery of deicing chemicals and diverting the discharge of these chemicals away from Lakes Hood and Spenard is the major factor to the recovery of the lakes.

The abundance of aquatic vegetation and insects in Lakes Hood and Spenard is a good indicator that the lake ecosystem is healthier and getting stronger. During the summer of 2008 the aquatic vegetation in the lakes was removed in aircraft operating areas using an aquatic weed harvester. Due to an exceptionally cool and cloudy summer, much less vegetation was removed compared to the previous string of warm and sunny seasons. The goal of this program is to prevent floating and submerged weeds from causing interference with aircraft operations. Invasive species of aquatic vegetation is a huge problem in many lakes and estuaries throughout the world. Fortunately all of the various types of aquatic vegetation found in Lakes Hood and Spenard are native to Alaska and local lakes.

Continued study and management of the water quality in our lakes will ensure both the health of the waterbodies and the safety of the aviators and passengers using Lakes Hood and Spenard.

During the 2007-2008 Winter Season 591,786 gallons of aircraft deicing chemicals (propylene and/or ethylene glycol) was reportedly used at ANC. While the majority of these fluids are discharged away from the lakes, 73,449 gallons of the glycol mixtures was used in areas hydraulically connected to the lakes. Of this amount, the airport's Glycol Recovery Vehicle (GRV) picked up 22,140 gallons. Overall this is a 30% reduction of chemicals that would have been discharged into Lakes Hood and Spenard without these efforts.

Noise Compatibility Program
The Airport's Noise section works with the FAA, Airlines and members of the surrounding neighborhoods to minimize and mitigate aircraft noise within the Anchorage Bowl. Aircraft arriving and departing Anchorage are advised to forgo using noise sensitive runways at all time. This generally means that the planes take off and descend into Anchorage over Cook Inlet. Airlines coming into Anchorage are also required to keep their flight path west of Potter Marsh to minimize noise impacts to the community during the evening and night hours. At times, weather conditions and airport operations such as runway maintenance and snowplowing require routing aircraft over the city.

The Noise section continues to monitor our Flight Tracking/Noise Management System. The system provides a tool to quantify aircraft noise exposure by collecting data from ten strategically placed automated noise monitors in the surrounding community that can be

correlated with aircraft arrivals and departures. The system allows the Airport to monitor the flight path, altitude and speed of aircraft that arrive, depart or transfer through the airspace over Anchorage and match them to corresponding decibel levels. Data from these noise monitors allows the Airport team to respond in a timely manner to the noise concerns of our Airport neighbors and provides a means to communicate effectively with aircraft operators about minimizing community impacts.

The Airport's Residential Sound Insulation Program (RSIP) completed its sixth year of construction activities. During the 2008 season 146 apartments and 19 homes were retrofit with acoustical windows, doors, attic insulation and ventilation system improvements to reduce interior sound levels a minimum of 5 decibels. To date, 552 dwellings have been retrofitted with sound insulation and noise reduction techniques as part of our Quieter Home Program. An additional 57 residential dwellings were designed and will be modified during the summer of 2009.

If you have any questions regarding this information please contact me at 266-2129

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